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 To: Examiner Tsai, Henry
 From: Lawrence J. Merkel

 Fax: 703-872-9306
 Pages: 5 (including cover sheet)

 Phone:
 Date: December 29, 2004

 Re: US SN 09/824,978 (5500-66000)
 Phone: 512-853-8855

Attached please find a copy of the Petition under 37 CFR 1.144, which was previously filed in U.S. Serial No. 09/824,978 on December 6, 2004, with the U.S. Patent Office. This Petition is being resubmitted due to notification that it has not been entered or received by the U.S. Patent Office. Along with the Petition is a copy of the date-stamped return receipt postcard evidencing receipt of the Petition in the U.S. Patent Office on December 6, 2004.

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 09/824,978 Tsai, Henry Examiner: Filed: April 2, 2001 Group/Art Unit: 2183 Inventors: Atty. Dkt. No: 5500-66000 § Kevin J. McGrath and David S. Christie 00 00 00 00 00 00 I hereby certify that this correspondence is being deposited with the United States Postal Service with anficient postage as first class mail in an envelope addressed to Commissioner for Patents, Alexandria, VA 22313-1450, on the date indicated below. Title: Multiple Entry Points for System Call Instructions Lawrence J. Merkel presof Registered Representative ş 12/2/04 Date

## **PETITION UNDER 37 CFR 1.144**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## Dear Sir:

This paper is submitted as a petition under 37 CFR 1.144 from the restriction requirement made in the Final Office Action dated October 7, 2004 and maintained (and apparently made final) in the Advisory Action mailed November 23, 2004. Applicants note that the time for reply to the Final Action expires January 7, 2005. Applicants would appreciate a decision on this petition prior to that date, if at all possible. Applicants have not yet received an action on the merits of all claims currently pending in the application.

In the Final Office Action dated October 7, 2004, the Examiner presented a restriction requirement identifying three species. The species were enumerated by groups of claims. Specifically, Group I included claims 1-5, 7-15, 17-25, 27-30, and 42; Group II included claims 31-41; and Group III included claims 43-55. Groups II and III are claims added by amendment in the Response filed July 20, 2004. Accordingly, the Examiner constructively elected the originally presented claims (Group I). Applicants

subsequently filed a Response to the Final Office Action, traversing the restriction and explaining why the restriction was improper. Specifically, Applicants noted that the Examiner had not shown that the alleged species were mutually exclusive. In the Advisory Action mailed November 23, 2004, the Examiner maintained that the restriction requirement was proper and alleged that certain features of the claim groups are mutually exclusive. Applicants respectfully submit that the Groups I, II, and III are not mutually exclusive species. Applicant hereby petitions for withdrawal of the restriction requirement for at least the following reasons.

The Examiner's restriction requirement is improper because the alleged species enumerated by the Examiner are not disclosed as species in the present application. By definition, species must have mutually exclusive characteristics. See M.P.E.P. § 806.04(f). According to M.P.E.P. § 806.04(f):

The general test as to when claims are restricted, respectively, to different species is that fact that one claim recites limitations which under the disclosure are found in a first species but not in a second, while a second claim recites limitations disclosed only for the second species and not the first. This is frequently expressed by saying that claims to be restricted to different species must recite the mutually exclusive characteristics of such species. (emphasis added).

Note that "mutually exclusive characteristics" is a requirement of the species as described in the disclosure. "Mutually exclusive characteristics" does not mean that one claim recites a limitation not expressly recited in another claim.

The three alleged species enumerated by the Examiner are not described in the specification as having mutually exclusive characteristics. For example, in the Advisory Action, the Examiner has asserted that Group I is mutually exclusive to Group II because Group II includes a plurality of instructions emulating a first instruction and a plurality of instructions being executed in place of the first instruction. First, Applicants note that the above highlighted features are not recited in the independent claims of Group II.

Furthermore, the claims of Group I refer to an execution core (claim 1) or a processor (claim 11) which has various features performed "responsive to a first instruction".

Nothing in claim 1 or claim 11, for example, excludes the execution core or processor

from being responsive to the first instruction by emulating the first instruction with a plurality of instructions or executing a plurality of instructions in place of the first instruction. The specification discloses embodiments in which a processor (or execution core within the processor) are responsive to the first instruction through emulation of the first instruction and/or executing other instructions in place of the first instruction (see, e.g., Figs. 9-14 and the corresponding description in the specification page 29, line 24 to page 40, line 19). Accordingly, Group I is no mutually exclusive to Group II.

The Advisory Action alleges that Group I is mutually exclusive to Group III because Group III involves the operating mode being selected from a plurality of operating modes responsive to the operand size of the first instruction. However, nothing in Group I is mutually exclusive of the above features. Embodiments described in the specification process a system call (SYSCALL) instruction and also process a system return (SYSRET) instruction. These embodiments have various features such as those recited in the independent claims of Group I for processing the SYSCALL instruction and also have various features such as those recited in the independent claims of Group III for processing the SYSRET instruction. Thus, embodiments disclosed in the specification implement features recited in Group I as well as features recited in Group III. Accordingly, Group I and Group III are not mutually exclusive.

For at least the above stated reasons, Applicants submit that the claim groups enumerated by the Examiner do not define species having mutually exclusive characteristics under Applicant's disclosure. Thus, the restriction requirement is improper.

## CONCLUSION

In light of the above remarks, Applicant requests that the restriction requirement be withdrawn.

If any extension of time (under 37 C.F.R. § 1.136) is necessary to prevent the above referenced application from becoming abandoned, Applicants hereby petition for such extension. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert & Goetzel PC Deposit Account No. 50-1505/5500-66000/LJM.

Also enclosed herewith are the following items:

Return Receipt Postcard

Respectfully submitted,

Lawrence J. Merkel

Reg. No. 41,191

AGENT FOR APPLICANT(S)

Meyertons, Hood, Kivlin, Kowert & Goetzel PC P.O. Box 398

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Date: 12/2/04

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IN THE UNITED STATES PATE OF AND TRADEMARK OFFICE P.O BOX 1450, ALEXANDRIA, VA 22313-1450

Inventor(s): Kevin J. McGrath and David S. Christie

Assignce: Advanced Micro Devices, Inc.

Serial No.: 09/824,978 Filing Date: April 2, 2001

Title: Multiple Entry Points for System Call Instructions

Atty. Docket No. 5500-66000/TT4231

The date stamp of the mail room of the U.S. Patent and Trademark Office hereon will acknowledge receipt of the attached 1) Petition under 37 CFR 1.144; and 2) Return Postcard.

LJM\dmp

Via First Class Mail

Date: December 2, 2004